

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of:

Isabelle Guyon et al.

Serial No. 10/057,849

Filed: January 24, 2002

For: METHODS OF IDENTIFYING
PATTERNS IN BIOLOGICAL
SYSTEMS AND USES THEREFOR



Group Art Unit: 2121

Examiner: George S. Davis

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

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In accordance with 37 CFR Sections 1.97 and 1.98, the items identified in this Information Disclosure Statement ("IDS") are brought to the attention of the Office. The items are listed on the attached form PTO/SB/08A and PTO/SB/08B. Copies of non-U.S. patent documents are enclosed herewith.

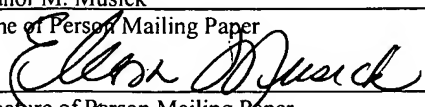
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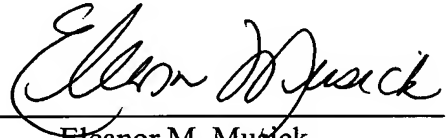

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material (37 CFR 1.97(h)), or even qualifies as "prior art" under 35 USC 102 with respect to this invention unless specifically designated by Applicant as such.

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Respectfully submitted,

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**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet

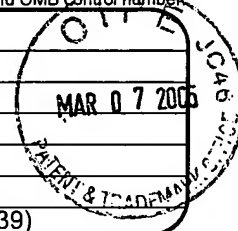
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Complete if Known

Application Number	10/057,849
Filing Date	01-24-2002
First Named Inventor	Isabelle Guyon
Art Unit	2121
Examiner Name	George B. Davis
Attorney Docket Number	0161 (112092-0039)

**U. S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
	AA	US- 4,881,178-B1	11-14-1989	Holland	
	AB	US- 5,138,694-B1	08-11-1992	Hamilton	
	AC	US- 5,649,068-B1	07-15-1997	Boser	
	AD	US- 5,809,144-B1	09-15-1998	Sirbu	
	AE	US- 5,950,146-B1	09-7-1999	Vapnik	
	AF	US- 6,128,609-B1	10-03-2000	Barnhill	
	AG	US- 6,134,344-B1	10-17-2000	Burges	
	AH	US- 6,157,921-B1	12-05-2000	Barnhill	
	AI	US- 6,427,141-B1	07-30-2002	Barnhill	
	AJ	US- 6,658,395-B1	12-03-2003	Barnhill	
	AK	US- 6,714,925-B1	03-30-2004	Barnhill	
	AL	US- 6,760,715-B1	07-06-2004	Barnhill	
	AM	US- 6,789,069-B1	09-07-2004	Barnhill	
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FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T ⁶
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)				Complete if Known	
				Application Number	10/057,849
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				First Named Inventor	Isabelle Guyon
				Group Art Unit	2121
				Examiner Name	George B. Davis
Sheet	2	of	2	Attorney Docket Number	0161 (112092-0039)

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	BA	ALON, U., et al., "Broad patterns of gene expression revealed by clustering analysis of tumor and normal colon tissues probed by oligonucleotide arrays", <i>Proc. Natl. Acad. Sci. USA</i> , June 1999, pp. 6745-6750, Vol. 96, Cell Biology	
	BB	BLUM, A.L., et al., "Selection of Relevant Features and Examples in Machine Learning", <i>Artificial Intelligence</i> , Dec. 1997, pp. 245-271, Vol. 97.	
	BC	BREDENSTEINER, E.J., et al., "Multicategory Classification by Support Vector Machines", <i>Computation Optimizations and Applications</i> , 1999, pp. 53-79, Vol. 12	
	BD	BROWN, M.P.S., et al., "Knowledge-based analysis of microarray gene expression data by using support vector machines", <i>Proc. Natl. Acad. Sci. USA</i> , Jan. 4, 2000, pp. 262-267, Vol. 97, No. 1	
	BE	DEVIJVER, P., et al., <i>Pattern Recognition. A Statistical Approach</i> , 1982, pp. 218-219, Prentice-Hall International, London	
	BF	FUREY, T.S., et al., "Support vector machine classification and validation of cancer tissue samples using microarray expression data", <i>Bioinformatics</i> , 2000, pp. 906-914, Vol. 16, No. 10	
	BG	GOLUB, T.R., et al., "Molecular Classification of Cancer: Class Discovery and Class Prediction by Gene Expression Monitoring", <i>Science</i> , Oct. 15, 1999, pp. 531-537, Vol. 286	
	BH	GUYON, I., et al., "An Introduction to Variable and Feature Selection", <i>Journal of Machine Learning Research</i> , 2003, pp. 1157-1182, Vol. 3	
	BI	HASTIE, T., et al., "Gene Shaving: a New Class of Clustering Methods for Expression Arrays", Technical Report, Stanford University, 2000, pp. 1-40	
	BJ	KOHAVER, R., "The Power of Decision Tables", <i>European Conference on Machine Learning (ECML)</i> , 1995, 16 pages	
	BK	KOHAVER, R., and JOHN, G.H., "Wrappers for Feature Subset Selection", <i>Artificial Intelligence</i> , Dec. 1997, pp. 273-324, Vol. 97, Issue 1-2, Special issue on relevance	
	BL	LE CUN, Y., et al., "Optimal Brain Damage", <i>Advances in Neural Information Processing Systems 2</i> , 1990, pp. 598-605	
	BM	MUKHERJEE, S., et al., "Support Vector Machine Classification of Microarray Data", Technical Report CBCL Paper 182, AI, Memo 1676 M.I.T., 1998	
	BN	WESTON, J., et al., "Feature Selection for SVMs", <i>Proc. 15th Conference on Neural Information Processing Systems (NIPS)</i> , 2000, pp. 668-674	
	BO	ZHANG, X. and WONG, W., "Recursive Sample Classification and Gene Selection based on SVM: Method and Software Description", Technical Report, Department of Biostatistics, Harvard School of Public Health, 2001, 5 pages	
	BP	GUPTA, P., et al., "Beam Search for Feature Selection in Automatic SVM Defect Classification", <i>16th International Conference on Pattern Recognition (ICPR'02)</i> , Aug. 2002, p. 20212, Vol. 2 (abstract only)	
Examiner Signature		Date Considered	

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